

Date: Friday, 9/15/2006 12:00:55 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WHEEL SHAFT
Job Number	: 28621		
Estimate Number	: 10449		
P.O. Number	: <i>N/A</i>	Part Number	: D33341
This Issue	: 9/15/2006	S.O. No.	: <i>N/A</i>
Prsht Rev.	: NC	Drawing Number	: D3334 REV. B1
First Issue	: <i>N/A</i>	Project Number	: N/A
Previous Run	: 25685	Drawing Revision	: B1
	Type : MACHINED PARTS	Material	: <i>N/A</i>
Written By	: <i>[Signature]</i>	Due Date	: 10/5/2006
Checked & Approved By	: <i>[Signature]</i>	Qty:	12 Um: Each
Comment	: Est: B 05.02.02 Revised material; Added Powder Coat KJ/J LM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M4140HR3500	4140 Heat Treated Bar
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Comment: Qty.: 0.6563 f(s)/Unit Total : 7.8756 f(s)

4140 HEAT TREATED BAR

Material: AISI 4140 or ASTM A304-02/A-434-BC/A193-03-Grade-B7/A29-03/A322-91 or UNS# G41400

(M4140H-R3.500)

Batch: *N/A* *1000011**12*

2.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
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Comment: MORI SEIKI

1- Cut blanks: Ø3.500" Bar to 7.750" long

2- Turn as per Folio FA492 and Dwg D3334

3- Deburr

BG 06-09-25 11

PTU

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

BG 06-09-25 11

4.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS1

Machine as per Folio FA492 and Dwg D3334

Identify as D3334-1

ML 06/10/14 11

5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

ML 06/10/14 11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D 3351 PAR #: NA Fault Category: Prod / MACHINED PWP NCR: (Yes) No DQA: (X) Date: 06/11/01
 QA: N/C Closed: (X) Date: 06/11/01

NCR: <u>28621</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06-09-25	2	undercut on ϕ of shaft. Tool broke during machining	<u>[Signature]</u> <u>Z</u>	Part has been scrapped. No replace, use for setup, then destroy.	<u>BG</u> 06-09-25	<u>[Signature]</u> 06-09-25	<u>[Signature]</u> <u>Z</u>	<u>[Signature]</u> 06-09-25

NOTE: Date & initial all entries

Date: Friday, 9/15/2006 12:00:56 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL SHAFT

Job Number: 28621

Part Number: D33341

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

En 06/10/15 x 11

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3

Mask thread and bearing surface

yl 06/10/27 x 11

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

JB 06/10/31 (11)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: WS

JB 06/10/31 (11)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

06/11/01 (11)

Job Completion



CL 06/11/01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	28621
Description: Wheel Shaft		Part Number:	D3334-1
Inspection Dwg: D3334 Rev: B1		Page 1 of 1	

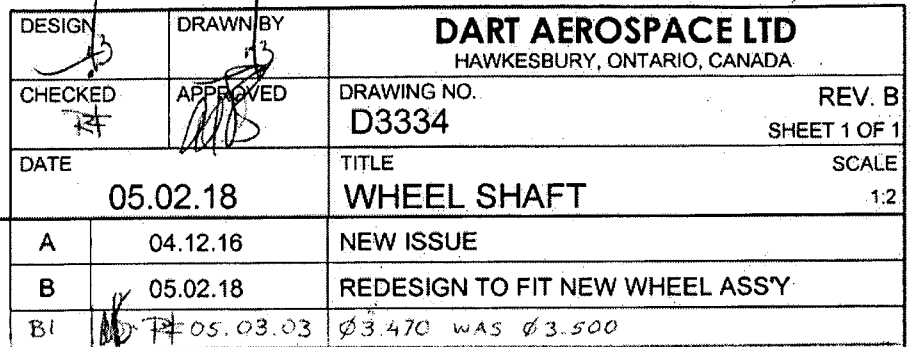
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
7.468	+/-0.010	7.466	—			
0.94	+/-0.030	.940	—			
0.200	+/-0.010	0.205	—			
Ø0.129	+0.005/-0.000	Ø0.130	—			
4.740	+0.000/-0.030	4.725	✓			
1.04	+/-0.030	1.04	—			
Ø1.750	+/-0.010	1.750	—			
0.750	+/-0.010	.751	✓			
1.180	+0.000/-0.002	1.180	—			
2.250	+/-0.005	2.250	✓			
1.125	+/-0.010	1.117	—			
3.060	+/-0.010	3.060	—			
Ø0.386	+0.005/-0.000	Ø0.390	—			
1.300	+/-0.005	1.300	—			
Ø3.470	+/-0.010	3.470	✓			

Measured by: BG / gml	Audited by: SP	Prototype Approval:	N/A
Date: 06/10/14	Date: 06/10/14	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.26	New Issue	KJ/JLM	<i>[Signature]</i>



05/02/22



1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03-GRADE-B7/ A2
OR UNS#-G41400 (REF. DART SPEC. M4140H-R3.500)
2) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.010 TO 0.020

NO. 28621

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